

#### **401 KAR 59:240. New perchloroethylene dry cleaning systems.**

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
Department for Environmental Protection  
Division for Air Quality

Relates to: KRS Chapter 224.20-100, 224.20-110, 224.20-120

Pursuant to: KRS 13.082, 224.10-100

Necessity and Function: KRS 224.10-100 requires the Department for Natural Resources and Environmental Protection to prescribe regulations for the prevention, abatement and control of air pollution. This regulation provides for the control of volatile organic compound emissions from new perchloroethylene dry cleaning systems.

##### **Section 1. Definitions.**

As used in this regulation, all terms not defined in this section shall have the meaning given to them in 401 KAR 50:010.

- (1) "Affected facility" means a dry cleaning system which uses perchloroethylene.
- (2) "Dry cleaning system" means a series of equipment or operations which includes, but is not limited to washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping valves used for the purpose of commercial cleaning of fabrics.
- (3) "Classification date" means February 4, 1981.

##### **Section 2. Applicability.**

- (1) This regulation shall apply to:
  - (a) Each affected facility commenced on or after the classification date defined in Section 1 of this regulation and located in a county or portion of a county designated as non attainment for ozone in 401 KAR 51:010, for any classification except marginal; and
  - (b) Each affected facility commenced on or after the effective date of this regulation which is part of a major source located in a county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010.
- (2) Each affected facility commenced on or after the classification date defined in Section 1 of this regulation but prior to the effective date of this regulation which is part of a major source located in a county or portion of a county designated attainment or marginally nonattainment for ozone in 401 KAR 51:010 shall be exempt from this regulation except that control devices and procedures required at the time it commenced shall continue to be operated and maintained.

##### **Section 3. Standard for VOCs.**

The owner or operator of an affected facility shall install, maintain and operate the control equipment such that the following requirements are met:

- (1) There shall be no liquid leakage of organic solvents from the system.
- (2) The entire dryer exhaust shall be vented through a properly functioning carbon adsorber or equally effective control device.
- (3) The maximum organic solvent concentration in the vent from the dryer control device shall not exceed 100 ppm before dilution.
- (4) Filter and distillation wastes.
  - (a) The residue from a diatomaceous earth filter shall be cooked or treated so that wastes shall not contain more twenty-five (25) kg of solvent per 100 kg of wet waste material.

- (b) The residue from a solvent still shall not contain more than sixty (60) kg of solvent per 100 kg of wet waste material.
- (c) Filtration cartridges shall be drained in the filter housing for at least twenty-four (24) hours before being discarded. The drained cartridges shall be dried in the dryer tumbler after draining.
- (d) Any other filtration or distillation system may be used if equivalency to these requirements is demonstrated. A system reducing waste losses below one (1) kg solvent per 100 kg clothes cleaned shall be considered equivalent.

#### **Section 4. Compliance.**

- (1) Liquid leakage shall be determined by visual inspection of the following sources:
  - (a) Hose connections, unions, couplings and valves;
  - (b) Machine door gasket and seating;
  - (c) Filter head gasket and seating;
  - (d) Pumps;
  - (e) Base tanks and storage containers;
  - (f) Water separators;
  - (g) Filter sludge recovery operations;
  - (h) Distillation units;
  - (i) Diverter valves;
  - (j) Saturated line from line basket; and
  - (k) Cartridge filters.
- (2) Dryer exhaust concentration shall be determined by the proper installation, operation, and maintenance of approved equipment as determined by the department or by performance tests specified by the department.
- (3) The amount of solvent in filter and distillation wastes shall be determined by ASTM D 322-67 (77), and substituting collector C from ASTM E 123-78. ASTM methods have been incorporated by reference in 401 KAR 50:015.

#### **Section 5. Compliance Timetable.**

- (1) Affected facilities which were subject to this regulation as in effect on February 4, 1981, shall have achieved final compliance upon startup.
- (2) The owner or operator of an affected facility that, on or after the effective date of the regulation, becomes subject to this regulation for a reason other than construction, modification, or reconstruction shall be required to complete the following:
  - (a) Submit a final control plan for achieving compliance with this regulation no later than three (3) months after the date the affected facility becomes subject to this regulation.
  - (b) Award the control system contract no later than five (5) months after the date the affected facility becomes subject to this

- regulation.
- (c) Initiate on-site construction or installation of emissions control equipment no later than seven (7) months after the date the affected facility becomes subject to this regulation.
  - (d) On-site construction or installation of emission control equipment shall be completed no later than eleven (11) months after the date the affected affected facility becomes subject to this regulation.
  - (e) Final compliance shall be achieved no later than twelve (12) months after the date the affected facility becomes subject to this regulation.
  - (f) If an affected facility becomes subject to this regulation because it is located in a county previously designated nonurban nonattainment or redesignated in 401 KAR 51:010 after November 15, 1990, final compliance may be extended to May 31, 1995, and the schedule in paragraphs (a) through (d) of this subsection adjusted by the cabinet.

#### **Section 6. Exemptions.**

Perchloroethylene dry cleaning facilities which are cooperated shall be exempt from this regulation.

#### **Section 7. Variances.**

Variation with the standards and limitations contained in this regulation, if supported by adequate technical information, may be considered by the department on a case-by-case basis to allow for technological or economic circumstances which are unique to a source. Case-by-case alternatives approved by the cabinet, but not previously authorized by the U.S.EPA

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